

**METHODS FOR INHIBITING VIRAL REPLICATION *IN VIVO*****ABSTRACT OF THE DISCLOSURE**

**[00173]** The present invention is directed to methods of modulating viral replication *in vivo* comprising administering to an individual a therapeutically or prophylactically effective amount of a composition comprising arginine deiminase modified with polyethylene glycol, to methods of concurrently modulating viral replication and treating cancer, and to methods of modulating nitric oxide levels in a patient, among others.